The effects of online customer reviews and online customer ratings on purchasing intentions in west java marketplaces

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Abstract
Technological developments are overgrowing; one of the technologies that are developing is the internet. Technological advances from the internet have led to changes in consumer lifestyles; the changes referred to are consumers who are interested in online shopping activities. However, online shopping is significantly different from offline shopping, where consumers cannot directly assess the product to be purchased. This difference is also a risk for potential consumers when shopping online. So to get information about the product that will be purchased, prospective consumers will use online customer reviews and online customer ratings in the marketplace. This study aims to determine whether online customer reviews and online customer ratings affect buying interest in the marketplace in West Java, either partially or simultaneously. The sample was determined by the non-probability sampling method with 140 respondents and using multiple regression analysis. Based on the study results, it is known that online customer reviews and online customer ratings have an effect of 56.8% on buying interest.

Keywords: Buying interest; online customer rating; online customer review
INTRODUCTION

Today, technology development is proliferating, both in developed countries and in developing countries such as Indonesia. One of the information and communication technologies that are developing is the internet. Quoting from data released by the Association of Indonesian Internet Service Providers APJII regarding the number of internet users in Indonesia, internet users continue to grow every year. In the second quarter of 2020, the number of internet users in Indonesia continues to grow. Indonesia reached 73.7 percent of Indonesia’s total population of 266.9 million, which was an increase from the previous year of 8.9 percent or the equivalent of 25.5 million internet users.

Dzulqarnain (2019) explained that technological advances from the internet resulted in changes in consumer lifestyles. The change in question is that consumers are starting to be interested in online shopping activities. The convenience also supports this and other advantages of shopping online; according to the Indonesian Internet Association (APJII), in 2020, consumers choose to shop online because the price is much lower, can be done anywhere, and is also faster more practical.

The growing trend of online purchasing is also evident in West Java Province; according to the Head of BPS, West Java Province Dyah Anugrah Kuswardani (2020), West Java has the highest level of e-commerce transaction activity in Indonesia. This is also supported by data released by the Badan Pusat Statistik (BPS) of West Java, which indicates that the population of West Java was 48.27 million people in September 2020, with the majority of them being generation Z and millennials, according to Ignatius Untung, the General Chairperson of the Indonesian E-Commerce Association (idEA). As a result, it is unsurprising that West Java Province has the most significant level of e-commerce activity.

The distinction between online and offline buying is stark. The distinction in question is purchasers' capacity to evaluate a product they wish to purchase. This distinction is also a concern for internet shoppers. At the same time, purchasers who purchase online cannot inspect the items firsthand and must rely on the seller’s information, descriptions, and photographs. Due to the danger associated with this online purchase transaction, potential buyers will use various methods to persuade themselves to purchase things online, one of which is through searching for product information. According to Ardianti & Widiartanto (2019), consumers would seek additional information about the product they are about to purchase to mitigate the unfavorable impact. A simple approach to obtain this information is to peruse a store’s reviews and ratings. Farki et al. (2016) further suggest that as e-commerce has grown, customer evaluations have become the primary source of information for buyers, sellers, and manufacturers alike. On the one hand, customer evaluations and ratings offered by consumers in the marketplace provide information to future consumers, lessening their level of unease about a product.

Online consumer reviews are one of the marketplace's several features. According to Elwalda and Lu (2016), online customer reviews are a form of electronic word of mouth (eWOM) or direct consumer opinions that enable purchasers to freely and quickly post comments or evaluations about a product or service online, independent of an advertisement. Meanwhile, according to Lackermair et al. (2013), online customer rating is similar to online customer reviews, except that the reviews or opinions provided by purchasers are on a scale established by the marketplace, often in the form of stars, with more stars indicating a more excellent value good. Farki and co-authors (2016) According to Farki et al. (2016), online customer review and rating elements in the marketplace are methods for increasing consumer interest and confidence. Customer purchasing interest is influenced by various variables, one of which is online consumer review and rating (Ichsan et al., 2018).

The researchers concentrated on five marketplaces, namely Shopee, Tokopedia, Bukalapak, Lazada, and Blibli, since these five marketplaces have the highest monthly visitor count in Indonesia, according to data given by Iprice for the first quarter to the fourth quarter of 2020.

The online customer review and online customer rating issues are worth discussing because they are currently being investigated globally, as is the case with the research undertaken (Chen & Chang, 2018) on Airbnb, a platform for the hotel sector. The previously conducted study focused only on food reviews, book reviews, and film reviews. While there have been some studies conducted on e-commerce, the number is still very modest. Thus, this study intends to address the limitations of prior research by
conducting market research and determining the influence of online customer evaluations and ratings on consumer purchasing an interest in the West Java marketplace.

**Online customer reviews**

According to Mo et al. (2015), online customer reviews are reviews given by previous consumers relating to information from the assessment of a product about various aspects; with this information, potential consumers can obtain the quality of the product they are looking for reviews and experiences made. By consumers who have purchased products from online sellers before. According to Megawati (2018), online customer review indicators consist of 3 dimensions, namely Credibility (Trustworthy, Honest), Expertise (Professional, Useful), and Fun (likable, Interesting, and Likely to Buy from This Website).

**Online customer rating**

According to Engler et al. (2015), online customer rating in online products is one way for consumers to have opinions about the quality of the product. However, sometimes there is a bias that occurs in its measurement, mainly due to product ratings from consumers that describe overall consumer satisfaction, not only on the products but also on the services of online sellers. According to Farki et al. (2016), online customer rating indicators are Perceived usefulness, enjoyment, and control.

**Buying interest**

According to Maskuri et al. (2019), buying interest is the stage of the respondent's tendency to take action before actually making a purchase decision. This theory explains the position of buying interest in consumer behavior, namely when someone makes a purchase decision. Indicators of buying interest, according to Ferdinand (2014), namely transactional interest, referential interest, preferential interest, and exploratory interest.

Based on Gesiter (2020) research, online customer review is a variable that affects consumer online shopping interest at Bukalapak online store in Padang City. The better the online customer review, the more consumers' interest in online shopping at the online store will increase. These results indicate that consumers' interest in online shopping at online stores is influenced by online customer reviews conducted by previous consumers. Reviews made by previous consumers make it easier for other potential consumers to shop online to search and find information about their products to influence online shopping interest.

In addition to online customer reviews, the online customer rating variable has been shown to have a relationship with consumer buying interest and is one of the essential features (Sarmis, 2020). This is in line with the research by Julianti & Aini (2019), which explains that a product that has a good rating from previous customers will give a positive value to the product to make consumers more confident in the products sold in the marketplace.

Online customer reviews and online customer ratings can generate buying interest in consumers Ichsan et al., (2018). It is also supported by the research results of Farki et al. (2016), who found that reviews and ratings proved to have a significant influence on customer buying interest in the marketplace.

Based on the description of the theoretical basis and relevant previous research, this research proposes the following hypothesis:

- **H1**: Online customer reviews have a positive effect on buying interest at the marketplace in West Java
- **H2**: Online customer rating has a positive effect on buying interest at the marketplace in West Java
- **H3**: Online customer reviews and online customer ratings positively affect buying interest at the marketplace in West Java.

**METHOD**

This study employs a quantitative research design that includes three variables: online customer review (X1), online customer rating (X2), and purchasing interest (Y). The population sampled comprises all West Java customers who have made an online purchase through one of five predefined marketplaces, namely Shopee, Tokopedia, Bukalapak, Lazada, or Blibli. Purposive sampling was used to determine the number of samples taken based on the study's criteria. Consumers aged 17 and West Java who had
made at least one online purchase in less than six months across five predetermined marketplaces. Hair et al. (2016) explain that the sample size can be determined using a minimum of 5 to 10 times the number of indicators to b. Consequently, the number of respondents in this survey was 140, which was calculated by multiplying the number of indicators by ten.

The analytical techniques used are the classical assumption test, multiple linear regression analysis, hypothesis testing, and determinant coefficient \((R^2)\), all of which are processed using the Software Statistical Product and Service Solution (SPSS) 25 program, which has been validated for data instruments, specifically validity and testing reliability.

RESULTS AND DISCUSSION

Following the validity check, it is determined that all statement items in the online customer review, online customer review variable indicator, and online customer review indicator are genuine, as their computed \(r\) values exceed the \(r\) table value of 0.166. Additionally, reliability tests were conducted. The online customer review, online customer rating, and purchasing interest variables are trustworthy since their Cronbach's alpha values are better than 0.7.

The classical assumption test was conducted, including the normality, multicollinearity, and heteroscedasticity tests—the significance of Asiymp. Sig (2-tailed) is 0.200 when the result is more significant than 0.05, based on the normality test using the Kolmogorov-Smirnov test (1 sample KS). As a result, it is possible to conclude that the data is typically distributed. The multicollinearity test is used to detect if a regression model is multicollinear. As shown by the tolerance value and variance inflation factor (VIF), the tolerance value is more significant than 0.1, 0.330, and the variance inflation factor (VIF) value. Less than ten dollars, or 3.029, it may be inferred that no multicollinearity exists between the independent variables in this study. The glejser test was used to determine heteroscedasticity; the findings indicated that the Sig. The value for each variable is 0.920 for the Review variable and 0.917 for the rating variable. Because the value of Sig. is more than 0.05, it can be deduced that the regression equation model does not exhibit heteroscedasticity.

The model for multiple linear regression is then tested. The following table summarizes the findings of multiple linear regression analysis:

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>B</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>5.695</td>
<td>2.016</td>
</tr>
<tr>
<td></td>
<td>Review</td>
<td>.217</td>
<td>.055</td>
</tr>
<tr>
<td></td>
<td>Rating</td>
<td>.524</td>
<td>.123</td>
</tr>
</tbody>
</table>

Based on the results of multiple regression processing, multiple regression equations are obtained, namely:

\[ Y = 5.695 + 0.217X_1 + 0.524X_2 + e \]

From the multiple regression equation, it can be concluded that the positive constant value \((\alpha)\) is 5.695, meaning that there is a positive influence on the online customer review \((X_1)\) and online customer rating \((X_2)\) variables. If the online customer review \((X_1)\) and online customer rating \((X_2)\) variables increase, the value of buying interest will also increase.

The coefficient value for the online customer review variable \((X_1)\) is 0.217, indicating that the online customer review variable has a positive effect on the buying interest variable \((Y)\). If the online customer review value is increased by 1%, it will increase buying interest by 0.217.

The coefficient value for the online customer rating variable \((X_2)\) is 0.524, and this indicates that the online customer rating variable \((X_2)\) has a positive effect on the buying interest variable \((Y)\). If the online customer rating value increases by 1%, it will increase buying interest by 0.524. After testing the
multiple linear regression model, a hypothesis test consists of the t-test and f-test. The results of the t-test can be seen in the following table:

Table 2. Comparison of t-count and t-table = 5%

<table>
<thead>
<tr>
<th>Variable</th>
<th>t_count</th>
<th>t_table</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Customer Review (X1)</td>
<td>3.983</td>
<td>1.656</td>
<td>.000</td>
</tr>
<tr>
<td>Online Customer Rating (X2)</td>
<td>4.254</td>
<td>1.656</td>
<td>.000</td>
</tr>
</tbody>
</table>

Based on the results of the t-test, it is known that online customer review (X1) has a significant effect on the buying interest variable (Y), this can be seen from the significant value of online customer review where the value of sig. of 0.00 < 0.05 and the value of t-count > t-table (3.983 > 1.656), so H1 is accepted. Furthermore, online customer rating (X2) has a significant effect on the buying interest variable (Y); this can be seen from the significant value of the online customer rating variable (X2) where sig. of 0.00 < 0.05 and the value of t-count > t-table (4.254 > 1.656), so H2 is accepted.

Table 3. F-test test results

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1670.4</td>
<td>2</td>
<td>835.2</td>
<td>93.452</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>1224.4</td>
<td>137</td>
<td>8.937</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2894.8</td>
<td>139</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F_table</td>
<td></td>
<td>3.06</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In table 3 f-table is obtained from df1 = k – 1 = (3 – 1 = 2) and df2 = n-k (140 – 3 = 137) and obtained a value of 3.06. The data processing results show the f-count value of 93.452, greater than f-table, which is 3.06, and the sig value. 0.00 < 0.05. So, it can be concluded that H3 is accepted; namely, online customer reviews and online customer ratings have a positive and significant effect on buying interest simultaneously.

Table 4. Correlation Coefficient and Coefficient of Determination

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.753a</td>
<td>.568</td>
<td>.561</td>
<td>3.16106</td>
</tr>
</tbody>
</table>

From the results of data processing in table 4, it is known that the R-value obtained is 0.753, and this shows a strong relationship between online customer reviews and online customer ratings on buying interest of 75.3%. The value of R Square (R²) is 0.568, which means that online customer reviews and online customer ratings affect buying interest by 56.8%. At the same time, the remaining 43.2% is explained by other factors not examined in this study, such as product factors or promotional factors, and others.

The effect of online customer reviews on buying interest in marketplaces in west java

Based on the research results that have been done, it was found that H1 was accepted where online customer reviews had a positive and significant effect on buying interest. It can be seen from the significant value of the online customer review variable where sig. Equal to 0.00 < 0.05 t-count obtained by 3.983 is more significant than t-table, 1.656 with a significance level of 0.00 greater than 0.05 and a positive regression coefficient of 0.365. Online customer reviews have a somewhat important role, and this is because reviews can provide convenience to prospective consumers in obtaining product-related information following the opinions of consumers who have purchased the product previously; through this review feature, prospective consumers can find out product quality, packaging and delivery times, also service from the seller. The results of this study are in line with research conducted by Gesitera (2020), which indicates that potential consumers from previous consumers see the better an online customer review, the more they will affect their online shopping interest, either directly or through their trust. Thus, to increase consumer online shopping interest in online marketplaces, online marketplaces or sales partners need to improve online customer reviews.
The effect of online customer ratings on buying interest in marketplaces in West Java

Based on the research results that have been done, it is found that $H_2$ is accepted where online customer ratings have a positive and significant effect on buying interest. With $t$-count value obtained at 4.254, which is greater than the $t$-table, which is 1.656 with a significance level of 0.00 greater than 0.05 and a positive regression coefficient of 0.424, and a positive regression coefficient of 0.424. Online customer ratings have advantages over online customer reviews, one of which is a more straightforward display that makes it easier for consumers to give ratings. This online customer rating can also be used as a tool by potential consumers in comparing a product with other products in the online marketplace. Although this online customer rating has several weaknesses, it is proven to significantly influence consumer buying interest. This follows research by Julianti & Aini (2019), which explains that products that have a good rating from previous consumers will give a positive value to the product. It will make consumers have more confidence in the products sold in the online marketplace.

The effect of online customer reviews and online customer ratings on buying interest in marketplaces in West Java

Based on the research results that have been done, it is found that $H_3$ is accepted where online customer reviews and online customer ratings have a positive effect on buying interest. With a $f$-count of 93.452, which is greater than $f$-table, which is 3.06 and a significance level of 0.00 is less than (0.05). A multiple linear regression analysis shows that online customer rating has a more dominant influence on buying interest than online customer review, which is 0.524. If the online customer rating is increased by one unit, buying interest will increase by 0.524. This study also shows that if there is a change in online customer reviews and online customer ratings, there will also be changes in buying interest. This can be seen from the results of the R Square analysis of 0.568, which means that online customer reviews and online customer ratings affect buying interest as much as 56.8%. In comparison, the remaining 43.2% is influenced by other variables not examined in this study, such as product factors or promotional factors, and others. The results of this study support the research conducted by Farki et al. (2016), which explains that online customer reviews and online customer ratings have a significant relationship to customer buying interest in online marketplaces in Indonesia.

CONCLUSION

Based on the results of research and discussion, it is concluded that online customer reviews and online customer ratings have a positive and significant effect on buying interest in the Shopee, Tokopedia, Lazada, Bukalapak, and Blibli marketplaces in West Java, either partially or simultaneously.

REFERENCES


